54000 4 WA ZAIZ MARCH 1988 6/1/989

APPENDIX IV

INSPECTION CHECKLISTS



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GENERAL SITE INSPECTION INFORMATION FORM

(Site Name Site Name B. Street (or other identifier)
Α.	Site Name B. Street (or other identifier)
	Scattle WA 98119 Kong City D. State E. Zip Code F. County/ Name
C.	City D. State E. Zip Code F. County Name
G.	Site Operator Information (25%) 225-0500
	1. Name Chemical Precessors, Lie 206) 225-0500 2. Telephone Number
	3. Street 2203 airford Way 4. City Scattle 5. State WA 6. Zip Code &
Н.	Site Description
	Oil Water treatment facility Type of Ownership
I.	Type of Ownership
	1. Federal2. State3. County4. Municipal5. Private
J.	
	1. Generator2. Transporter3. Treatment4. Storage5. Disposal
K.	Regulatory Status
	1. Interim Status3. Part B Permit Application Submitted
	2. Permitted Facility4. Part B Permit Application in Preparation
L.	
	1. Principal Inspector Name 3. Organization (206) 442-7/76
	1. Timespal inspector waste 5. organization (206) 442-7176
	2. Title St. Compleme Surshgelors. Telephone No. (area code and No.)
M.	Inspection Participants
_	1. W. Donglas Smith 6.
	2. 7.
_	3. 8. 4. 9.
	5. 10.

GENERAL FACILITY CHECKLIST

Section A - General Facility	7 5	S	S	t	t	S	S	9	7	7	۲.	t	i	. :	1		i	: ;	C	а	2	7	F	Ī		3	a	r	9	16	I	e	G	-		i	A	1	OI	i	t	20	0	S
------------------------------	-----	---	---	---	---	---	---	---	---	---	----	---	---	-----	---	--	---	-----	---	---	---	---	---	---	--	---	---	---	---	----	---	---	---	---	--	---	---	---	----	---	---	----	---	---

i.	Does	facility have EPA Identification No.?	Yes _No
	а.	If yes, EPA I.D. No. $\underline{W} A \underline{D} 000812917$ If no, explain.	,
2.	Has f	facility received hazardous waste from a foreign source?	Yes No
	а.	If yes, has it filed a notice with the Regional Administrator?	YesNo
Wast	e Anal	lysis	
3.		facility maintain a copy of the waste analysis plan at <u>-</u> facility?	Yes _No
	а.	If yes, does it include:	
		3. Sampling method used to obtain sample? $\underline{\nu}$	Yes No Yes No Yes No Yes No Yes No
		 a. Procedures to be used to determine the identity of each movement of waste. b. Sampling method to be used to obtain representative sample of the waste to be identified. 	YesNo YesNo
4.	Does	the facility provide adequate security through:	
	а.	24-hour surveillance system (e.g., television monitoring vox guards)? 24 M.	Yes _No
		OR	

(continued)

			EXHIBIT IV-2 (continued)	
	b.	1.	Artificial or natural barrier around facility (e.g., fence or fence and cliff)?	Yes _No
			Describe	
			AND	
		2.	Means to control entry through entrances (e.g., attendant) television monitors, locked entrance, controlled roadway access)?	Yes _No
			Describe	a Marine 13. In
Gene	eral I	nspec	ction Requirements	
5.	Does	the	owner/operator maintain a written schedule at the	
٠.			for inspecting:	
	а.	Mon	itoring equipment?	Yes No
	b.		ety and emergency equipment?	Yes No
			urity devices:	1 Yes No
	d.		rating and structural equipment?	Yes No
			es of problems of equipment:	
	e.	тур	es of problems of equipment:	
		1	Malfunction	Yes No
		1.	1-11	
		2.		
		3.	Discharges	Yes No
6.	Does	the	owner/operator maintain an inspection log?	Yes _No
	а.	If	yes, does it include:	
		1.		Yes_No
		2.	Name of inspector?	Yes No
		3.		Yes _No
		4.	Date and nature of repairs or remedial action? There are mentionance request forms but not tied to bush there any malfunctions or other deficiencies not	Yes No refer
	b.	Are	there any malfunctions or other deficiencies not	Yes'No
			rected? (Use narrative explanation sheet.)	
Per	sonnel	Tra	ining	
7	Door	the	owner/operator maintain personnel training records	Yes No
7.	Dues	Life	codition?	

(continued)

		~35	
	How .	long are they kept? >3.5 yrs	
	а.	If yes, do they include:	
		1. Job title and written job description of each position?	Yes _No
		 Description of type and amount of training? Records of training given to facility personnel? 	Yes _No
Reg	uireme	nts for Ignitable, Reactive, or Incompatible Waste	
8.	Does	facility handle ignitable or reactive wastes?	LYes _No
	a.	If yes, is waste separated and confined from sources of ignition or reaction (open flames, smoking, cutting and welding, hot surfaces, frictional heat), sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat?	de beretion and
		 If yes, use narrative explanation sheet to describe separation and confinement procedures. If no, use narrative explanation sheet to describe sources of ignition or reaction. 	we of the
	ь.	Are smoking and open flame confined to specifically designated locations?	Yes _No
)	c.	Are "No Smoking" signs posted in hazardous areas?	_Yes _No
	d.	Are precautions documented (Part 264 only)?	_Yes _No
9.	Chec	k containers	
	а.	Are containers leaking or corroding?	_Yes No
	ь.	Is there evidence of heat generation from incompatible wastes?	_Yes _No
C -	P		
360	ction b	- Preparedness and Prevention	
1.		here evidence of fire, explosion, or contamination of the ronment?	Yes _No
	If y	es, use narrative explanation sheet to explain.	w 011
(c	ontinue	fatelite,	11/23/10 oyds from
OSWE	R Dir.	No. 9938.2A IV-4 (last pe	March 1988

2.	Is the facility equipped with:
, (,	a. Internal communication or alarm system? Yes No
us well	1. Is it easily accessible in case of emergency?Yes _No
Jalled	b. Telephone or two-way radio to call emergency response Yes No personnel?
	c. Portable fire extinguishers, fire control equipment, Ves No spill control equipment, and decontamination equipment?
	d. Water of adequate volume for hoses, sprinklers, or water spray system?
	1. Describe source of water \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
— 3.	Is there sufficient aisle space to allow unobstructed move— Yes No ment of personnel and equipment?
4.	Has the owner/operator made arrangements with the local Yes _No authorities to familiarize them with characteristics of the
	facility? (Layout of facility, properties of hazardous waste handled and associated hazards, places where facility personnel would normally be working, entrances to roads inside facility, possible evacuation routes.)
5.	In the case that more than one police or fire departmentYesNo might respond, is there a designated primary authority?
	a. If yes, name primary authority Station on Drawes SFD
6.	Does the owner/operator have phone numbers of and agreements Yes _No with State emergency response teams, emergency response contractors, and equipment suppliers? in Continuous Hour
	a. Are they readily available to all personnel? Yes _No _No
7.	Has the owner/operator arranged to familiarize local hospitals with the properties of hazardous waste handled and types of injuries that could result from fires, explosions, or releases at the facility?
8.	If State or local authorities decline to enter, is thisYesNo entered in the operating record?
(cor	tinued)

Sect	ion C	- Contingency Plan and Emergency Procedures	
1.	Is a	contingency plan maintained at the facility?	Vies _No
	а.	If yes, is it a revised SPCC Plan?	_Yes _Xo
	Ъ.	Does contingency plan include:	
		1. Arrangements with local emergency response organizations?	Les No
		Emergency coordinators' names, phone numbers, and addresses?	Yes _No
		3. List of all emergency equipment at facility and descriptions of equipment?	Yes _No
		4. Evacuation plan for facility personnel?	Yes _No
2.		nere an emergency coordinator on site or on call at times?	Yes _No
Sect	ion D	- Manifest System, Recordkeeping, and Reporting	
1.	Doès	facility receive waste from offsite?	Yes _No
	а.	If yes, does the owner/operator retain copies of all manifests?	Yes _No
		1. Are the manifests signed and dated and returned to the generator?	Yes No
		2. Is a signed copy given to the transporter?	Mes No
2.		the facility receive any waste from a rail or water k shipment) transporter?	Yes _No
	а.	If yes, is it accompanied by a shipping paper?	Ves No
		1. Does the owner/operator sign and date the shipping paper and return a copy to the generator?	
		2. Is a signed copy given to the transporter?	LYES No Ma
3.	Has	the owner/operator received any shipments of waste that	Yes No
	were	inconsistent with the manifest (manifest discrepancies)?	bon moury
	а.		Yes _No
		1. If no, has Regional Administrator been notified?	YesNo
(cor	tinue	d)	

4.	Does the owner/operator keep a written operating record at the facility? Het called Operating Record consents of large receipts, work regions etc. day to	_Yes	LHO 2 of g
	a. If yes, does it include:		
	 Description and quantity of each hazardous waste received? 	∠Yes	No
	Methods and dates of treatment, storage, and disposal?	LYes	No
	Location and quantity of each hazardous waste at each location?	LYes	No
	 Cross-references to manifests/shipping papers? Records and results of waste analyses? Report of incidents involving implementation of 	Yes Yes	No
	the contingency plan?	_Yes	<u>_No</u>
7990,94	7. Records and results of required inspections? 8. Monitoring or testing analytical data (Part 264)? 9. Closure cost estimates and, for disposal facili-	Yes	_No
fortury	ties, post-closure cost estimates (Part 264)? 10. Notices of generators as specified in §264.12(b)	Ves Ves	No
, , , , , , , , , , , , , , , , , , ,	(Part 264)?	<u></u>	_NO
5.	Does the facility submit a biennial report by March 1 every even-numbered year? Wasterday presents was 1988	Yes	No
	a. If yes, do reports contain the following information:	1.454.11	
	 EPA I.D. number? Date and year covered by report? Description/quantity of hazardous waste? Treatment, storage, and disposal methods? Monitoring data under §265.94(a)(2) and (b)(2) (Part 265)? 	Yes Yes Yes Yes	No No No No No
	 Most recent closure and post-closure cost estimates For TSD generators, description of efforts to reduce volume/toxicity of waste generated, and actual comparisons with previous year? 	_Yes	No No
6.	8. Certification signed by owner/operator?	Yes	No
•	Has the facility received any waste (that does not come under the small generator exclusion) not accompanied by a manifest?	Yes	∠No
	a. If yes, has he submitted an unmanifested waste report to the Regional Administrator?	_Yes	No
7.	Does the facility submit to the Regional Administrator reports on releases, fires, and explosions; contamination and monitoring data; and facility closure?	Yes	No

LAND DISPOSAL RESTRICTIONS CHECKLIST*

1.	Ar	e haz	ardous	wastes	land-d	isposed	on site	? ("Lar	nd disposa	l" _Yes	No
	pi	le, i	njectio	n well.	land	itill, s treatmen	urface t facil	impoundr	nent, waste	9	Т
	va	ult,	sait b or bunk	ed form er inte	nded for	undergr or dispo	ound min	ne or ca	ive, concre	ete	
	111	01 01	I/ the I	and by	means (or open	detonat.	ion and	anan huma		
	WIL	ere re	sylunes	Contin	ue to e	exnibit	hazardou	us chara	cteristics	s).	
	a.	If tru	yes, a	re one	or more	of the	follow	ing circ	umstances		
		1.	9200.):(suant to	_Yes	No
		2.	a pet	tion u	nder 62	68.6?			uant to	Yes	No
		3.	Dispos	sing of see act	soil o	r debri:	correcti	ve acti	m a CERCLA	Yes	No
		4.	Facili	ty is a	orohibi small	ted unti	il Novem	ber 8,	1988? less than	Ves	No
			100 kg	of haz	zardous	waste	per mont	h?	. cos chan		
2.		restr cted	icted w waste d	astes d	or resi	duals fr way pri	om trea	tment o	fare?	Yes	No
3.	Are haza	there	active wastes	surfac ?	e impo	undments	used f	or trea	tment of	Yes	No
	а.	If y requ	es, doe irement	s the u s set f	init's Forth i	design and §268.4	nd oper	ation m	eet the	Yes	No
4.	Has Subp wast	art	acility of §26	sought 8 for t	exemp	tion fro	any production a rest	rohibit ricted h	ion under nazardous	Yes	No
	а.	preh	ensive	mponent environ	s (wasi mental	s demon te I.D., charact	waste a	analysis	, com-	Yes	No
		site	, QA/QC	plan,	samplir	ng, test	ing, mod	deling)?			
5.	Has wast	the fa	cility ough was	determ ste ana	ined wh lysis?	nether i	t genera	ates a	estricted	_Yes_	No
	a.	If ye waste	es, is ! !(s)?	he fac	ility,	in fact	, handli	ing a re	stricted	_Yes _	_No
cor	tinue	1)									
										\	
CUE	D D:									,	

	b. c.	ity requi	es, does the restricted waste require treatment? es, has the generator notified the treatment facil- in writing, and does the notification include all ired components ([PA hazardous waste number, cor- anding treatment standard, manifest number of ship-	Yes Yes	No
6.	Does	the fough FO	facility handle EPA Hazardous Waste Nos. FOOl 005 (solvent wastes)?	Yes	No
	a.	If ye	es, do any of the following conditions apply:		
		1.	The generator of the solvent waste is a small	Yes	No
		2.	quantity generator (not more than 1000 kg/month)? The solvent waste is generated from a CERCLA response corrective action?	Yes	No
		3.	The solvent waste is a solvent-water mixture, solvent containing sludge, or Solvent-contaminated soil (non-CERCLA or RCRA corrective action) containing less than 1 percent total FOOL through FOO5 solvent constituents.	Yes	No
	b.	If no dispo 8, 19	, have any of these restricted wastes been land- sed (except in an injection well) since November 86?	Yes	No
7.	Does F021	the f , FO23	acility handle EPA Hazardous Waste Nos. FO2O, , FO26, FO27, or FO28 (dioxincontaining wastes)?	Yes	No
	a.	If ye	s, do any of the following conditions apply:		
		1.	Wastes are treated to meet standards of Subpart D of §268?	Yes	No
		2.	Wastes are disposed of at a facility that has been granted a petition?	Yes	No
		3.	An extension has been granted?	Yes	No
	b.	If no after	, will these restricted wastes be land disposed November 8, 1988?	Yes	No
8.	Are n	restrio	cted wastes being treated?	Yes _	No
	a.	uents	s, have any of their associated hazardous constitexceeded the "Constituent in Waste Extract" levels?	_Yes_	No
*See guida	OSWER	Dir.	No. 9938.1A (LDR Inspection Manual) for more detailed	∍d	

GENERATOR'S CHECKLIST

Sect	ion A	- EP	A Identification No.		
1.	Does	gene	rator have EPA I.D. No?	Ves	No
	a.	If y	es, EPA I.D. No. <u>WAD 000812917</u>		_
Sect	ion B	- Mai	<u>nifest</u>		
1.			rator ship waste offsite?	Ves	No
	a.	If no	o, do not fill out Sections B and D.		
	b.	If ye	es, identify primary offsite facility(s). Use character explanation sheet.	wester C	lent
2.	Does	gener	rator use manifest?	Yes	No
	a.	If r erat		_Yes	No
		1,	If yes, does generator indicate this when sending waste to a TSD facility?	Yes	No
	b.	If y	es, does manifest include the following information?		
		1.	Manifest document No	∠Yes	No
		2.	Generator's name, mailing address, telephone No.	∠Yes .	No
		3.	Generator EPA I.D. No.	∠Yes .	No
		4.	Transporter Name(s) and EPA I.D. No.(s)	LYes	No
Q		5.	 Facility name, address, and EPA I.D. No. Alternate facility name, address, and EPA I.D. No. 	Yes Yes	No lest bout
tes	2		c. Instructions to return to generator if undeliverable	_Yes _	No Death trave.
		6.	Waste information required by DOE - shipping name, quantity (weight or vol.), containers (type and number)	Ves	_No yes
(cont	inued))			

		7.	Emergency information (optional) (special handling instructions, telephone No.)	Yes _No
		8.	Is the following certification on each manifest form?	_Yes _No
			This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and the EPA.	paraphrased contentione me palaniforme me kes wrong
,		9.	Does generator retain copies of manifests?	Ves No
If ye	es, c	omple	te a through e.	
	а.	1. 2.	Did generator sign and date all manifests? Who signed for generator?	Yes _No
		Name	Operator, receiving on shift Title	
	b.	1. 2. Name	Did generator obtain handwritten signature and date of acceptance from initial transporter? Who signed and dated for transporter? Linelly a Charles July. Title Ower	YesNo
	c.		generator retain one copy of manifest signed by rator and transporter?	YesNo
	d.		eturned copies of manifest include facility or/operator signature and date of acceptance?	Yes _No
	e.	Does	generator retain copies for 3 years?	Yes _No
Sect	ion C	- На	zardous Waste Determination	R
1.			erator generate solid waste(s) listed in Subpart D Hazardous Waste)?	MYes No
	а.	If y (inc	res, list waste and quantities Commel Reforts clude EPA Hazardous Waste No.)	+ Part A
(con	tinue	d)	Most recent Part A	was Sef 25, 1990

		EXHIBIT IV-4 (continued)	=1 .
2.	that	generator generate solid waste(s) listed in Subpart C exhibit hazardous characteristics? (corrosivity, ability, reactivity, EP toxicity)	Vies _No
	а.	If yes, list wastes and quantities (include EPA Hazardous Waste No.)	
	Ъ.	Does generator determine characteristics by testing or by applying knowledge of processes?	
		I. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)?	Yes _No
		a. If equivalent test methods used, attach copy of equivalent methods used.	
3.	Are t	there any other solid wastes generated by generators?	_Yes _No
	а.	If yes, did generator test all wastes to determine nonhazardous characteristics?	YesNo
		 If no, list wastes and quantities deemed nonhaz- ardous or processes from which nonhazardous waste was produced (use additional sheet if necessary). 	
Sect	ion D	- Pretransport Requirements	
1.		generator package waste in accordance with 49 CFR 173, and 179 (DOT requirements)?	Yes _No
2.	а.	Are containers to be shipped leaking or corroding?	Yes No
	b. c.	Use sheet to describe containers and condition. Is there evidence of heat generation from incompatible wastes in the containers?	YesNo

172? (continued)

accordance with 49 CFR 172?

Does generator mark each package in accordance with 49 CFR

Does generator follow DOT labeling requirements in

			EXHIBIT IV-4 (continued)	
5.			ontainer of 110 gallons or less marked with the label?	Yes _No
	Impro	per I	ing: HAZARDOUS WASTE - Federal Law Prohibits Disposal. If found, contact the nearest policy safety authority or the U.S. Environmental Agency.	
	Gener	rator	name(s) and address(es) yes	
	Manii	fest o	document No. 4es	
6.	Does	gene	self transport thru subservery.	Yes No
7.	Accur	nulat	ion time	
	а.		containers used to temporarily store waste before sport?	Yes _No
		1.	If yes, is each container clearly dated: Also, fill out rest of No. 7 (accum. time)	Yes _No
	Ъ.	1.	Does generator inspect containers for leakage or corrosion? (265.174 - Inspections)	Yes _No
		2.	If yes, with what frequency?	daily
	с.	reac faci	generator locate containers holding ignitable or tive waste at least 15 meters (50 feet) from the lity's property line? (265.176 - Special Require- s for Ignitable or Reactive Wastes)	I then Lad it
NOTE	:	If t	anks are used, fill out checklist for tanks.	
	d.		the containers labeled and marked in accordance Section D-3, -4, and -5 of this form?	YesNo
NOTE	:		enerator accumulates waste on site, fill out check- for General Facilities, Subparts C and D.	

8. Describe storage area. Use photos and narrative explanation sheet.

Training.)

Does generator comply with requirements for personnel training? (Attach checklist for 265.16 - Personnel

Yes No

Jection E - Recordkeeping and Records

- •	Does generator keep the following reports for 3 years?
	a. Manifests and signed copies from designated facilities b. Annual reports c. Exception reports Done on manufest (1976 Society) Test results Yes No
2.	Where are the records kept (at facility or elsewhere)? also Georgalem
3.	Who is in charge of keeping the records?
	Name Cary Marinoto Title Co. accountant
Sect	ion F - Special Conditions
1.	Has generator received from or transported to a foreign source any hazardous waste?
	a. If yes, has he filed a notice with the RegionalYesNo Administrator?
	b. Is this waste manifested and signed by a foreignYesNo cosignee?
	c. If generator transported wastes out of the country,YesNo has he received confirmation of delivered shipment?

TRANSPORTERS CHECKLIST

Sect	ion A	- EPA I.D. No.	
1.	Does	transporter have an EPA I.D. No.?	Yes _No
	а.	If yes, what is EPA I.D.? <u>LOADOOO812917</u>	
Sect	ion B	- Transfer Facility Requirements	
1.	Does	transporter store wastes on site?	Yes _No
	а.	If yes, does transporter store wastes longer than 10 days?	_Yes _No
Sect	ion C	- Manifests	
1.	Does	transporter use manifests?	Yes _No
	а.	If yes, are manifests signed and dated?	Yes No
	Ъ.	Does transporter return signed copies of manifests to	Yes No
		generators?	,, ,,
	С.	Does transporter carry manifests with waste shipments?	Yes No
	d.	Does transporter obtain delivery date and signature of owner/operator at delivery?	Yes _No
	e.	Does transporter retain copies?	Yes No
	f.	Does transporter give remaining copies to accepting	Yes No
	~	transporter or facility? Is transporter a water (bulk shipment) transporter?	Yes No
	g.	is transporter a water (bulk shipment) transporter:	Zies _No
		If yes, is waste delivered to receiving facility by water?	Yes _No
		 Does transporter carry a shipping paper with the 	Yes No
		waste containing all information required on the	<u> </u>
		manifest (excluding EPA I.D. numbers, generator	
		certification, and signatures)?	
		 Does transporter obtain delivery date and hand- 	✓Yes _No
		written signature of owner/operator of designated	
		facility on manifest or shipping paper?	
		4. Does transporter retain copies of shipping papers or manifests, in accordance with §263.22?	Yes _No

(continued)

h.	Is t	ransporter a rail transporter?
	1.	If yes, when accepting waste from a nonrail
	2.	manifest acknowledging acceptance of waste? Does rail transporter return a signed copy of
	3.	Does rail transporter forward manifest copies to:
		a. The next nonrail transporter? b. Designated receiving facility (if reached by rail)? Yes No rail
		c. The last rail transporter designated toYesNo handle the waste in the U.S.?
	4. 5.	Does rail transporter retain a copy of manifest? Yes No Does rail transporter ensure that a shipping paper accompanies the hazardous waste and contains all information required on manifest (excluding EPA I.D., generator certification, and signatures)?
	6.	Does rail transporter obtain delivery date and handwritten signature of owner/operator of designated facility or the next nonrail transporter on manifest?
	7.	Does rail transporter retain a copy of the mani- fest or signed shipping paper? Yes No
i.	Does	transporter transport waste outside of the U.S.? Yes No Morning
	1.	If yes, does the transporter:
		a. Indicate on manifests the date that shipmentYesNo left the U.S.?
		b. Sign manifest and retain one copy?YesNo c. Return a signed copy of manifest to generator?YesNo
tion D	- Co	mpliance With the Manifest

Sect

1. Does transporter deliver entire shipment of hazardous waste to:

c.	Designated facility listed on manifest? Alternate designated facility, if emergency prevents delivery to designated facility? Next tesignated transporter? Place outside U.S. designated by generator? If no, does transporter contact generator for further	Yes No Yes No Yes No Yes No Yes No
	If no, does transporter contact generator for further directions, and then revise manifest accordingly?	Tes No della m
(continue		<i>"</i>

Section E - Recordkeeping

- 1. Does transporter keep a copy of manifest signed by generator, Ves No himself, and next designated transporter for 3 years?

- 4. Does transporter shipping waste outside of the U.S. keep <u>Yes No</u> for 3 years copy indicating that waste was shipped?

CONTAINERS CHECKLIST

Sect:	ion A - Use and Management	
l.	Are containers in good condition?	_YesNo
Sect:	ion B - Compatibility of Waste With Container	
1.	Is container made of a material that will not react with the $\underline{\nu}$ waste which it stores?	Yes _No
Sect	ion C - Management of Containers	
1.	Is container always closed while holding hazardous waste?	Yes_No
2.	Is container handled so that it will not be opened, handled, and stored in a manner which may rupture it or cause it to leak?	Yes _No
Sect	ion D - Inspections	
1.	Does owner/operator inspect containers at least weekly for Leaks and deterioration?	Yes _No
Sect	cion E - Containment (Part 264)	
1.	Do container storage areas have a containment system?	_YesNo
Sect	tion F - Ignitable and Reactive Waste	
1.	Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines?	Yes No
Sect	tion G - Incompatible Waste	
1.	Are incompatible wastes or materials placed in the same containers?	Yes No
2.	Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste?	Yes _No
(con	ntinued)	

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March 1988

OSWER Dir. No. 9938.2A

Section H - Closure (Part 264)

1. At closure, were all hazardous wastes and associated residues __Yes __No removed from the containment system?

SURFACE IMPOUNDMENTS CHECKLIST

Secti	on .1	- Design Requirements		
1.	Does	facility operate one or more surface impoundments?	YesN	C
	а.	If wes, has owner/operator installed two or more liners and a leachate collection system for any new units, replacement of any existing units, or lateral expansion of units?	YesN	0
	b.	Is owner operator exempt from double-liner leachate collection system requirements because Regional Administrator has determined that impoundment's design will prevent the migration of hazardous constituents?	YesN	o
	c.	Did owner/operator notify Regional Administrator 60 days prior to receiving waste (Part 265)?	YesN	io
	d.	If impoundment does not have a double liner, is it exempt due to one of the following reasons?	YesN	lo
		 Monofill contains only wastes from a foundry furnace emission controls or metal casting molding sand. Monofill has at least one liner for which there is no evidence of leaking. Monofill is located, designed, and operated to ensure that no migration of constituents into ground or surface water occurs. 		
	e.	Does owner/operator take measures to prevent overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error (Part 264)?		lo
	f.	Is impoundment surrounded by dikes (Part 264)?	YesN	lo
Sect	ion B	- Operating Requirements		
1.	Does	owner/operator maintain at least 60 cm (2 ft) of freed (Part 265)?	YesN	io
(con	tinue	i)		

	a	 If no, does owner/ by a qualified eng 	operator have certificgineer?	ation	Yes	No
Se	ctio	n C - Containment Sys	tem			
1.	Do (e	all earthen dikes ha g., grass, gravel) t	ve a protective cover o minimize erosion?		Yes	No
Sec	ction	D - Waste Analysis	and Trial Tests			
1.	Are (if	wastes treated in t yes, explain on a n	he surface impoundment? arrative sheet)	•	Yes	No
2.	was	the owner/operator te (or planning to) ferent than previous	which is substantially		Yes	No
3.	was	the owner/operator te (or planning to) stantially different	chemically treated a using a process that is from that previously u	sed?	Yes	No
4.	If tri	yes to 2 or 3 above, al treatment tests be	have waste analyses an een conducted?	d	Yes	No
	a.	If not, does owner/documentation on sin similar wastes?	operator have written milar treatment of		Yes Yes	
Sec	tion	E - Inspections				
1.	Doe	s owner/operator chec	ck freeboard level dail	y?	Yes	No
2.	veg	the surface impoundmetation inspected weefailures?	ment, dikes, and surrouncekly for deterioration	nding	Yes _	
3.	If	regulated under Part	264, does owner/operate	or:		
	a.	Inspect liners for i	mperfections (tears and tic liners and cracks, r soil-based liners)		Yes _	_No
	b.	Inspect the operatin weekly and after sto of deterioration, ma	g impoundment rms to detect evidence lfunction, and overtopp	ping?	Yes _	_No
	с.	stresses from the am	hat the dike will withs ount and type of waste fail due to cleaning?	tand to	Yes _	_No
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Section F - Emergency Repairs, Contingency Plans (part 264)

1.	Do	es facility have a contingency plan?	YesNo
	a.	If yes, does plan stipulate that impoundment he removed from service under the following conditions:	
		 Sudden drop in liquid level? Leaking dike? 	YesNo YesNo
	b.	Does plan detail the steps to be followed when removing impoundment from service, including:	
		 Shutting off flow into impoundment? Containing any surface leakage? Stopping the leak? Notifying Regional Administrator of problems in writing if leaks cannot be contained? 	YesNo YesNo YesNo YesNo
	c.	If impoundment was removed from service, did owner/operator take the necessary precautions to rectify problems before restoring impoundment to service?	YesNo
	d.	If impoundment was removed from service and was not restored to service, was impoundment closed in accordance with an approved closure plan?	YesNo
<u>Sec</u>	tion	G - Closure and Post-Closure	
1.		a closure plan retained at the facility?	Yes No
2.	At	closure, did owner/operator:	
	a .	Remove standing liquids (Part 265)?	Yes No
	b.	Remove waste and waste residue (Part 265)?	Yes No
	c.	Remove liner (Part 265)?	YesNo
	d.	Remove underlying and surrounding contaminated soil?	YesNo
(cor	ntinu	ued)	

	,	EXHIBIT IV-/ (continued)	
	е.	If not, did owner/operator demonstrate to Regional Administrator that the above materials were nonhazardous (Part 265)?	Yes No
		 If no, has owner/operator closed the impoundment and provided post-closure care (Part 265)? 	Yes No
3.	If	regulated under Part 264, has owner/operator:	
	a.	Removed or decontaminated waste residues, contaminated system components, subsoils, structures, and equipment, and managed them as hazardous waste?	Yes No
	b.	Eliminated free liquids by removing or solidifying remaining wastes or waste residues?	Yes No
	с.	Stabilized remaining wastes to a bearing capacity sufficient to support final cover?	Yes No
	d.	Covered the impoundment with final cover?	YesNo
4.	Did (Par	owner/operator leave any residuals in place at closure t 264)?	Yes No
5.	cove	ost-closure, does owner/operator maintain integrity of r and ground-water monitoring system, and prevent runnd runoff?	YesNo
Sec	tion	H - Ignitable and Departing Master	
		H - Ignitable and Reactive Wastes	
1.		ignitable or reactive wastes placed in the impoundment?	YesNo
		If no, do not complete b and c.	
		If yes, are they treated, rendered, or mixed before or immediately after placement in the impoundment so it no longer meets the definition of ignitable or reactive?	Yes No
		OR	
	c. I	s the impoundment used solely for emergencies?	Yes No
Sect	ion :	I - Incompatible Wastes	:
1.	Are	incompatible wastes placed in the impoundment?	√Yes _No
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	a. If yes, has the owner/operator taken precautions to prevent accidental ignition or reaction?	YesNo
For	facilities regulated under Part 264:	
Sec	tion J - Special Requirements for Hazardous Wastes F020, F021, F022, F023, F026, F027	
1.	Does the impoundment contain hazardous waste numbers F020, F021, F022, F023, F026, F027?	YesNo
	a. If yes, does the owner/operator operate the impoundment in accordance with a management plan approved by the Regional Administrator or comparable state authority?	YesNo

WASTE PILES CHECKLIST

<u>260</u>	tion A - Des	ign and Operating	<u>Requirements</u>	
1.	Is the pile	containing hazard	ous waste protected from wind	?YesNo
2.	Does waste (Part 264)?	pile have a liner	and leachate collection syste	mYesNo
	that wa	ste pile's design on of hazardous co	d to Regional Administrator characteristics will prevent nstituents into ground water	YesNo
3.	Is run-on d	iverted around act	ive portion (Part 264)?	YesNo
4.	Is runoff c	ollected and contro	olled (Part 264)?	YesNo
5.	Are collect	ion and holding fac	cilities emptied after storms	?YesNo
Sec	tion B - Was	te Analysis (Part	265)	
1.	ment analyz	entative sample of ed before the waste he compatibility of	waste from each incoming ship e is added to the pile to f the wastes?	pYesNo
2.	Does the and texture?	alysis include a vi	isual comparison of color or	YesNo
Sec	tion C - Cont	tainment (Part 265)		
1.	Is the leach	nate or runoff from aste?	n the pile considered a	YesNo
	a. If yes,	is the pile manage	ed with the following:	
	 Run- Lead Are 	on diversion? Chate and runoff co	ompatible with the waste? ollection? ding facilities periodically	YesNo YesNo YesNo YesNo
	OR			
	5. Is ton b	the pile protected by some other means	from.precipitation and run-	YesNo
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		Exhibit 14-0 (continued)	
Sec	tion	D - Monitoring and Inspection (Part 264)	
1.	Are	liners and covers inspected for damage during con- uction?	YesNo
2.	anu	waste piles inspected weekly for deterioration, run-on runoff controls, wind dispersal control, and proper ction of leachate collection system?	YesNo
Sect	tion	E - Ignitable or Reactive Wastes	
1.	Are	ignitable or reactive wastes placed in the pile?	YesNo
	a.	If yes, does the addition of the waste result in the waste or mixture no longer meeting the definition? (Use narrative explanation sheet to describe procedure.)	YesNo
		OR	
	b.	Is the waste protected from sources of ignition or reaction?	YesNo
		 If yes, use narrative explanation sheet to describe separation and confinement procedures. If no, use narrative explanation sheet to describe sources of ignition or reaction. 	
Sect	ion	F - Incompatible Wastes	
		incompatible wastes placed together in the pile?	Yes No
2.	Are	incompatible wastes separated from each other by a dike, or wall?	YesNo
	Is t leac shee	here evidence of fire, explosion, gaseous emissions, hing, or other discharge? (Use narrative explanation t.)	YesNo
<u>Sect</u>	ion	G - Closure and Post-Closure	

(continued)

1. Is a closure plan retained at the facility?

At closure, were all waste residues, contaminated system components, contaminated subsoils, and contaminated structures and equipment removed or decontaminated?	YesI	No
Were all contaminated subsoils removed from the site?	Yes	_No
a. If no, did owner/operator close the facility and per- form closure and post-closure care in accordance with §264.310 and 265.310?	Yes	_No
Is a plan for complying with No. 2 above included in closure plan?	Yes	_No
Is a contingency plan for complying with No. 3a above included in the plan?	Yes	_No
Is a contingency post-closure plan included?	Yes	No
Are cost estimates included in closure plan?	Yes	No.
tion H - Requirements for Wastes F020, F021, F022, F023, F026,	and F027	
Does facility place these F wastes in a waste pile?	Yes _	_No
a. If yes, does facility have an approved management plan for these wastes?	_Yes	_No
	components, contaminated subsoils, and contaminated structures and equipment removed or decontaminated? Were all contaminated subsoils removed from the site? a. If no, did owner/operator close the facility and perform closure and post-closure care in accordance with §264.310 and 265.310? Is a plan for complying with No. 2 above included in closure plan? Is a contingency plan for complying with No. 3a above included in the plan? Is a contingency post-closure plan included? Are cost estimates included in closure plan? cion H - Requirements for Wastes FO20, FO21, FO22, FO23, FO26, Does facility place these F wastes in a waste pile? a. If yes, does facility have an approved management plan.	components, contaminated subsoils, and contaminated structures and equipment removed or decontaminated? Were all contaminated subsoils removed from the site? a. If no, did owner/operator close the facility and perform closure and post-closure care in accordance with §264.310 and 265.310? Is a plan for complying with No. 2 above included in closure Yes plan? Is a contingency plan for complying with No. 3a above included in the plan? Yes

LAND TREATMENT CHECKLIST

Section A - Treatment Program (Part 264)	
1. Does facility follow an approved land treatment program?Yes	_No
Section B - Treatment Demonstration (Part 264)	
 Has owner/operator demonstrated to Regional Administrator that hazardous wastes used in the program are completely degraded, transformed, or immobilized? 	_No
Section C - Operating Requirements	
Is run-on diverted away from the land treatment facility? Is runoff from the land treatment facility collected? Are holding facilities emptied after storms? Is the runoff analyzed to see if it is a hazardous waste? Is facility managed to control dispersal? Yes Yes Yes Yes Yes Yes Yes Ye	No No No No No
ection D - Waste Analysis (Part 265)	
If the runoff is considered hazardous, how is it handled? (Use narrative explanation sheet.)	
. If it is not a hazardous waste, is it discharged through aYesN point source to surface waters?	No
a. If yes, list NPDES Permit No.	
What hazardous wastes are treated at the land treatment facility?	
Subpart D Listed Wastes Characteristic Wastes (EP Toxicity)	
continued)	

LAND TREATMENT #2

EXHIBIT IV-9 (continued)

	a.	min	these listed e the concentr sed the waste	ations of	ere analyses do these constitu ted?	ne to deter- ents which	Yes	No
		1.	If yes, what rative explan	are these ation shee	concentrations	? (Use nar-		
	b.	For the	those charact concentration	eristic wa s of the f	astes (EP) toxi following:	city, what are		
		Ba Ca Ch Le Me Se Si Er Li Me To 2,	rsenic arium admium hromium ead ercury elenium ilver ndrin indane ethoxychlor oxphene ,4-D ,4,5-TP silvex	Conc	centration, mg/	<u>liter</u>	<u>Waste</u>	
<u>Sec</u>	tion	E -	Food-Chain Cro	ps				
1.	Are	food	l-chain crops o	rown?			Yes	No
	a.	If y the	es, what are t soil and veget	the concentation:	trations of the	e following in		
	•			Soil con mg/li	centration, ter	Vegetation co		on,
		Ca Le	senic dmium ad rcury					
2.	Did grow	the	facility notif food-chain cro	y Regiona ps (Part :	l Administrator 265)?	that he is	Kes	No
(cor	ntinu	ed)						
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3.	Has ow health	mer/operator demonstrated that no harm is done to or environment (Part 264)?	Yes	No
4.	mercur	mer/operator demonstrated that any arsenic, lead, by, or other constituents under 265.273(b) will not be orted to crops (Part 265)?	Yes	No
3.	Does t	he facility treat waste that contains cadmium?	Yes	No
ž	a. If	no, do not fill out b.		
	b. If	yes, was the pH of the soil and waste mixture 6.5 or eater at the time of each waste application?	Yes	No
	1.	If the pH was less than 6.5, did the waste contain cadmium concentrations of 2 mg/kg or less?	Yes	No
Sec	tion F -	- Unsaturated-Zone Monitoring		
1.	Is an ((Part 2	unsaturated-zone monitoring plan kept at the facility 265)?	Yes	No
2	Does ow	wner/operator perform the following:		
	b. So c. Sa d. Ba e. Co f. De	oil monitoring? oil-pore water monitoring? ample depths below waste incorporation? ackground values (Part 264)? onsistent sampling and analysis procedures? etermination of significant changes? otification when change is found?	Yes Yes Yes Yes Yes Yes	No No No No No No
3	Does pi	an include the following (Part 265):		
	5. Nu	pth of sampling? mber of samples? equency and timing of samples?	_Yes _Yes _Yes	No No No
4	Does ow constit	ner/operator analyze for hazardous waste uents?	Yes	No

(continued)

Section G - Recordkeeping

1.	Are	e records kept at the facility of:		
	a. b.	Application dates? Application rates? Quantities?		YesNo YesNo YesNo YesNo
Sec	tion	H - Closure and Post-Closure		
1.	Is fac	a copy of the closure/post-closure cility?	plan kept at the	YesNo
2.	Doe	es closure plan address the following	g (Part 265):	
	a.	Control of the migration of hazard ardous waste constituents from the the ground water?	ous waste and haz- treated area into	YesNo
	b.	Control of the release of contamin the facility into surface water?	ated runoff from	YesNo
	с.	Control of the release of airborne taminants caused by wind erosion?	particulate con-	YesNo
	d.	Compliance with §265.276 concerni food-chain crops?	ng the growth of	YesNo
3.	Does (Par	s owner/operator ensure the follown rt 764):	ng during closure	
	a.	Maintenance of monitoring systems	on unsaturated zone?	YesNo
	b.	Maintenance of run-on controls?		YesNo
	С.	Maintenance of runoff management s	ystem?	YesNo
	d.	Wind dispersal control?		YesNo
	e.	Attempt to maximize degradation, to immobilization of hazardous waste	ransformation, and constituents?	YesNo
	f.	Continue to comply with any prohib concerning growth of food-chain cro	itions or conditions	Yes _No
(con	tinu	ued)		
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EXHIBIT IV-9 (continu	ueu)
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h. Establish a vegetative cover on the portion of the facility being closed at such time that the cover will not substantially impede degradation, transformation, or immobilization of hazardous constituents in the treatment zone? 4. During post-closure care, does owner/operator: a. Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone? b. Maintain a vegetative cover over closed portions of the facility? c. Maintain the run-on control system required under \$264.273(c)? d. Maintain the runoff management system required under \$264.273(d)? e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a Was certification submitted to Regional Administrator (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		g.	Continue unsaturated-zone monitoring in compliance with 264.278?	Yes	No
a. Continue all operations (including pH control) necessary to enhance degradation and transformation and sustain immobilization of hazardous constituents in the treatment zone? b. Maintain a vegetative cover over closed portions of the facility? c. Maintain the run-on control system required under S264.273(c)? d. Maintain the runoff management system required under \$264.273(d)? e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator (Part 265)? b. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		h.	not substantially impede degradation, transformation, or immobilization of hazardous constituents in the	Yes	No
immobilization of hazardous constituents in the treatment zone? b. Maintain a vegetative cover over closed portions of the facility? c. Maintain the run-on control system required under \$264.273(c)? d. Maintain the runoff management system required under \$264.273(d)? e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator Yes (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?	4.	Dur	ing post-closure care, does owner/operator:		
c. Maintain the run-on control system required under \$264.273(c)? d. Maintain the runoff management system required under \$264.273(d)? e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a Was certification submitted to Regional Administrator Yes (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples As specified in the plan?		a.	immobilization of hazardous constituents in the treat-	Yes	No
d. Maintain the runoff management system required under \$264.273(d)? e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with Yes \$264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator Yes (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		b.	Maintain a vegetative cover over closed portions of the facility?	Yes	No
e. Control wind dispersal of hazardous waste if required under \$264.273(f)? f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under \$264.276? g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator Yes (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		С.	Maintain the run-on control system required under §264.273(c)?	Yes	No
f. Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under §264.276? g. Continue unsaturated-zone monitoring in compliance with §264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		d.	Maintain the runoff management system required under §264.273(d)?	Yes	No
g. Continue unsaturated-zone monitoring in compliance with \$264.278? 5. Does facility have certification that closure was performed according to plan? a. Was certification submitted to Regional Administrator (Part 265)? 6. Does owner/operator continue the following during post-closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan?		e.	Control wind dispersal of hazardous waste if required under §264.273(f)?	Yes	No
5. Does facility have certification that closure was performed		f.	Continue to comply with any prohibitions or conditions concerning growth of food-chain crops under §264.276?	Yes	No
a. Was certification submitted to Regional Administrator (Part 265)? 6. Does owner/operator continue the following during post- closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan? Yes		g.	Continue unsaturated-zone monitoring in compliance with §264.278?	_Yes	No
6. Does owner/operator continue the following during post- closure (Part 265)? a. Soil-pore monitoring by collecting and analyzing samples as specified in the plan? Yes	5.	Does	facility have certification that closure was performed rding to plan?	Yes	No
a. Soil-pore monitoring by collecting and analyzing samples Yes as specified in the plan?		8	Was certification submitted to Regional Administrator (Part 265)?	_Yes	No
as specified in the plan?	6.	Does clos	owner/operator continue the following during post- ure (Part 265)?		
		a.	Soil-pore monitoring by collecting and analyzing samples as specified in the plan?	Yes	No
(continued)	(cor	tinu	ed)		

b.	Restrict access?	Yes	Nc
с.	Assure that growth of food-chain crops is in compliance?	Yes	Nc
d.	Control wind dispersal?	Yes	No
Section I	- Ignitable or Reactive Wastes		
1. Are	ignitable or reactive wastes placed in the facility?	Yes	No
a.	If yes, are the wastes treated, rendered, or mixed before or after placement in the landfill so it is no longer reactive or ignitable?	Yes	No
b.	Describe or attach a copy of treatment.		
Section J	- Incompatible Wastes		
1. Are in	ncompatible wastes placed in the facility?	Yes	No
a. Ar	re the incompatible wastes placed in different loca-	Yes	No

LANDFILLS CHECKLIST

Section A - Desi	qn Requirements
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1.	Does landfill have two or more liners and a leachate collection system between the liners?	Yes	No
2.	Did owner/operator notify Regional Administrator 60 days prior to receiving waste (Part 265)?	Yes	No
3,	If landfill does not have two liners and a leachate collection system, did owner operator adequately demonstrate to Regional Administrator that alternate design and operation prevents migration of hazardous constituents?	Yes	No
4.	If no double liner exists, does landfill fall into one of the following exemption categories:		
	a. Monofill only holds wastes from foundry furnace emission controls or metal casting molding sand?	Yes	No
	b. Monofill has at least one liner and there is no evidence that liner is leaking?	Yes	No
	Owner/operator demonstrates that monofill is located, designed, and operated to prevent migration of hazard- ous constituents?	Yes	No
5.	If landfill does not have two liners and a leachate collection system, does it have at least one liner for all existing portions (Part 264)?	Yes	No
	a. If yes, does this liner provide for the following:		
	 To prevent migration of wastes out of landfill to subsurface soil, ground water, and surface water (Part 264)? 	Yes_	No
	2. A leachate collection and removal system immediately above the liner constructed to be chemically resistant to the waste and strong enough not to collapse under pressure (Part 264)?	Yes _	No
6.	If owner/operator does not comply with No. 5 above, is he exempt after demonstrating to Regional Administrator that alternate design and operation prevents migration of hazardous constituents (Part 264)?	ves _	_No
(cor	ntinued)	\	\

Se	ctio	n B - Operating Requirements		
1.	Ar	e run-on controls preventing flow onto the active portion the landfill?	Yes	N
2. 3. 4.	Are	runoff collected and controlled? collection and holding facilities emptied after storms? the landfill managed so that wind dispersal is controlled?	Yes Yes Yes	N
Sec	ction	C - Monitoring and Inspection (Part 264)	*	
1.	Are	e liners inspected for defects during and after construc- on?	Yes	N
2.	Are	e landfills inspected weekly and after storms for defects?	Yes	N
Sec	tior	D - Surveying and Recordkeeping		
1	Doe	es owner/operator retain records at the facility?	Yes	Nc
	a.	If yes, are the following maintained:		
		 On map, exact location and dimensions, including depths, of each cell? Contents of each cell and approximate location of each hazardous waste type within the cell? 	Yes Yes	No
200	tion	E Closume and Book Classes		
		E - Closure and Post-Closure		
1.		a closure plan kept on site?	Yes	No
	a.	If yes, does cover provide for the following:		
	**	 Minimizing migration of liquids? Minimum maintenance? Promote drainage; minimize erosion? Accommodate settling and subsidence? Less permeable than bottom liner or natural subsoils? 	Yes Yes Yes Yes	No No No No
	b.	After final closure, does owner/operator provide for the following:		
(co	ntin	ued)		

		 Maintain final cover? Continue to operate leachate collection and removal system until leachate is no longer collected? 	Yes Yes	-
		Maintain ground-water monitoring?Prevent run-on and runoff from eroding and damaging cover?	Yes Yes	
		5. Protect and maintain surveyed bench marks?	Yes	N
Sec	tior	n F - Ignitable and Reactive Waste		
1.	Are	e ignitable or reactive wastes placed in the landfill?	Yes	No
	a.	If yes, is waste treated, rendered, or mixed before or immediately after placement so that it is no longer ignitable or reactive?	Yes	No
2.	Are	e ignitable wastes in containers placed in landfill?	Yes	No
	а.	If yes, attach a narrative describing how these wastes are handled to prevent ignition or reaction?		
Sec	tion	G - Incompatible Wastes		
1.	Doe	s owner/operator place incompatible wastes in landfill?	Yes	No
Sect	tion	H - Bulk and Containerized Liquids		
1.	Doe	s landfill receive any bulk or containerized liquid ardous waste?	Yes	No
	а,	If yes, have they been added to landfill since May 8, 1985?	Yes	No
2.	Does	s landfill receive containers of free liquids?	Yes	No
	a.	If yes, is at least one of the following conditions met:		
		Have free-standing liquids been removed by decanting or other methods; or have they been mixed with absorbent or solidified?	Yes	No
		 Are containers ampules? Is container designed to hold free liquids? Is container a lab pack? 	Yes Yes Yes	No No _No
(con	tinu	ued)		1

3.	Hav be	re containers holding liquids that are not hazardous waste een placed in the landfill since November 8, 1985?	s _Ye	esNo
	a.	If, yes, is one of the following conditions met:		
		 Was it the only reasonable alternative to place it in a landfill or unlined impoundment? 		
		2. Did placement not present a risk to contaminating any underground source of drinking water?	Yes	No
Sec	tion	I - Container Requirements		
1.	Are	containers placed in the landfill?	Yes	No
	a.	If yes, are they either:		
		 90 percent full? Crushed, shredded, or similarly reduced in volume? 	_Yes _Yes	No
Sect	tion	J - Overpacked Drums		
1.	Are	small containers of hazardous waste placed in landfill?	Yes	No
	a.	If yes, are the following requirements met?		
		1. Waste packaged in non-leaking container and tightly sealed?	Yes	No
	b. c.	Containers not overpacked according to DOT regulations? Absorbent material does not react with waste?	Yes Yes	No
	d.	Incompatible wastes not placed outside the same container?	Yes	No
	e.	Reactive waste treated or rendered nonactive before packaging?	Yes	No
Sect	ion	K - F020, F021, F022, F023, F026, and F027 Wastes (Part 2	64 only	1
1	Are	these wastes placed in landfill?	Yes	No
	a.	If yes, did owner/operator receive permission from Regional Administrator to do so?	Yes	No
	b.	Is documentation of "a" above on file at facility?	Yes	No

INCINERATORS CHECKLIST

Section	Α	-	Waste	Analysis	(Part	265	only)	

1.	Does owner/operator analyze all wastes he has not previouslyYestonditions?	_No
	a. If yes, does analysis include:	
	 Determination of heating value? Determination of halogen and sulfur content? Concentrations of lead and mercury? Yes Yes Yes	No No No
	b. If lead and mercury are not included, has owner/operatorYes proven this fact to Regional Administrator?	_ No
2.	Does owner/operator perform a waste feed analysis in theYes	No.
3.	Are waste analyses performed throughout normal operations?Yes	No
<u>Sect</u>	tion B - Principal Organic Hazardous Constituents (POHC's) (Part 264)	
1.	Does owner/operator use POHC's in accordance with facility'sYes	No
<u>Sect</u>	ion C - Performance Standards (Part 264)	
1.	Does incinerator burn at a destruction and removal efficiency _Yes _I (DRE) of at least 99.9999 percent for each POHC?	No
2.	Do stack emissions of more than 1.8 kg/h of HCl exceed both $_$ Yes $_$! 1.8 kg/h and 1 percent HCl in the stack?	No
3.	Does incinerator emit particulates greater than 180 mg/dryYesN	۷o
Sect	ion D - Permits	
. ,	Are wastes burned although no permit is issued (Part\264?YesN	lo
	tinued)	
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tinued)

	a.	If yes, are wastes burned in a trial burn (Part 264)?	Yes	No
		OR		
	b.	Does owner/operator have an exemption due to 264.340 (Part 264)	Yes	No
	С.	Does owner/operator burn hazardous waste during startup or shutdown if not allowed to do so in permit (Part 264)?	Yes	No
	d.	Is waste feed cut off when operating requirements are not met (Part 264)?	Yes	No
<u>Sec</u>	tion	E - Operating Requirements		
1.	Does	s incinerator operate per permit requirements (Part 264)?	_Yes	No
2.	Does	s owner/operator feed hazardous waste into incinerator n it is not at steady state (Part 265)?	Yes	No
Sec	tion	F - Monitoring and Inspections		,
1.	Does	s owner/operator conduct, at a minimum, the following:		
	a.	Existing instruments relating to combustion or emission control every 15 minutes (Part 265)?	Yes	No
	b.	Is complete incinerator and associated equipment inspected daily for leaks, spills, and emissions, and are all emergency shutdown controls and system alarms checked (Part 265)?	Yes	No
	С.	Are combustion temperature, waste feed rate, and combustion gas velocity all checked continuously (Part 264)?	Yes	No
	d.	Is CO monitored continuously (Part 264)?	Yes	No
	e.	Are waste and exhaust emissions sampled and analyzed (Part 264)?	_Ye's	No
	f.	Is incinerator usually checked daily for leaks and spills (Part 264)?	Yes	√No
(con	tinu	red)		

	g. Are emergency feed cutoff and alarms inspected weekly (Part 264)?	Yes	No
	h. Are monitoring and inspection data recorded and placed in operating log (Part 264)?	Yes	No
Sect	tion G - Closure		
1.	Is a closure plan kept on site?	Yes	No
2.	At closure, has owner/operator removed all hazardous waste residues from incinerator?	Yes	No
<u>Sect</u>	cion H - Interim Status (Part 265)		
1.	Does owner/operator burn F020, F021, F022, F023, F026, and/or F027 wastes?	Yes	No
	a. If yes, does owner/operator possess certification from Assistant Administrator for Solid Waste and Emergency Response to do so?	Yes	No

THERMAL TREATMENT CHECKLIST (PART 264 only)

NOTE: Applies to thermal treatment of hazardous waste in devices other than incinerators.

Sec	tion	Α -	Operating Requirements		
1.	Is	the	process a noncontinuous (batch) process?	LYes	No
	a.	If tio was	no, is the process operating at steady-state condings (including temperature) before adding hazardous te?	_Yes	No
	b.	Is tha	a waste analysis documented in the operating record t includes:		
		1. 2. 3. 4. 5.	Sulfur content? Concentration of lead?	Yes Yes Yes Yes	No No No No No
NOTE	Ξ:	4 ai	nd 5 not required if facility has written documented d w the elements are not present.	ata tha	t
2.	Does	s the	e owner/operator monitor the following when thermally hazardous wastes:		
	a.	At rela	least every 15 minutes, existing instruments which ate to the temperature and emission control:		
		1. 2. 3. 4. 5.	Waste feed? Auxiliary fuel feed? Treatment process temperature? Relevant process flow? Relevant level controls?	Yes Yes Yes Yes	No No No No
	b.	Stac	ck plume (emissions) at least hourly:		
		1. 2.	Color (normal)? Opacity?	Yes Yes	No
(con	tinu	ed)		٠.	

	С.	The	rmal	treat	ment	process	eq	uipment	at lea	ast da	ily:			
		2.	Emen	IIS, ā	shut	convey gitive down co	emi:	, pipes ssions? ols?	, etc.	, for	leaks,		Yes Yes	No
	d.	equ	ıpmer	it at	mater least r sear	weekly	the	e treati detect	ment pr corros	ocess sion o	or r leak	ing	Yes	
	е.	Cons	disc	tion harge	mater conf	ials of inement	the str	e area ructure:	immedia at le	tely :	surrou eekly?	nd-	Yes	No
Sec	tion	В -	Clos	ure					,					
1.	Is	a clo	sure	plan	maint	ained	at t	he faci	lity?				Yes	No
Sec	tion	C -	<u>Open</u>	Burn	ing									
1.	Is (Us	there e nar	evi rati	dence ve ex	of an olanat	y open ion she	bur eet)	ning of	hazar	dous w	aste?		Yes	No
2.	Is o	open	burn	ing o	deto	nation	of	waste e	xplosi	ves co	nducte	ed?	Yes	No
		If y	es,	is the		nation		formed						,
		Poun	ds o	f wast	e exp	losives s		Minim detona	um dist	tance the	from o	pen ty o	burnin r othe	g rs
		,	1,00	0-100 01-1,0 01-10, 01-30,	00 000				380 n 5 30 n	n (67 n (125 n (173 n (226	0 ft) 0 ft)			
Sect	tion	D - I	Parti	iculat	e Haza	ardous	Wast	<u>te</u>						
۱.	Does and/	owne or F(er/op 27 w	erato vastes	r burr ?	F020,	F02	21, F02	2, F023	, F026	5,		_Yes	No
		I POIII	ASS1	stant	Admir	perato nistrato no do se	or f	ave doct	mented d Wa st	permi	ission	-	_Yes	No

Sec	tion	E - Closure		
	D	oes the facility maintain a closure plan?	Yes	No
<u>Sec</u>	tion	F - Ignitable or Reactive Waste		
1.	Are pro	ignitable or reactive wastes placed in the treatment cess?	Yes	No
	a.	If yes, is the waste treated, rendered, or mixed before or immediately after being placed in the treatment process so it no longer meets the definition of ignitable or reactive?	Yes	No
		Describe or attach a copy of the treatment.		
Sec:	tion	G - Incompatible Wastes		
1.	Are or e	incompatible wastes placed in the same treatment process equipment?	Yes	No
2.	Are prev	hazardous wastes placed in washed equipment if equipment riously held incompatible waste?	Yes	No

GROUND-WATER MONITORING CHECKLIST

Sec	ction	n A - Monitoring System		
1.	Doe	es the facility have a ground-water monitoring system in eration?	Yes	No
	a .	If yes, does the system consist of:		
		 Minimally one upgradient monitoring well (Part 265)? Minimally three downgradient monitoring wells. (Part 265)? 	Yes Yes	No
	b.	Are monitoring wells cased so that the integrity of the boreholes is maintained (Part 265)?	Yes	No
	С.	Is a compliance monitoring system installed whenever hazardous waste constituents are detected at the compliance point (Part 264)?	Yes	No
	d.	Is a corrective-action program initiated whenever the ground-water protection standard is exceeded (Part 264)?	Yes	No
	е,	Is a detection monitoring program instituted in all other cases (Part 264)?	Yes	No
2.	Doe 264	s facility have a monitoring and response program (Part	Yes	No
	a.	If yes, is a compliance monitoring system instituted whenever hazardous constituents are detected at the compliance point (Part 264)?	Yes	No
	b.	Whenever the ground-water protection standard is exceeded, does facility institute a corrective-action program (Part 264)?	Yes	No
	С,	In all other cases, does facility institute a detection monitoring program (Part 264)?	Yes	No
Sect	ion	B - Sampling and Analysis (Part 265 only)		
	Does	the facility obtain and analyze samples from the nd-water monitoring system?	Yes	No
con	tinu	ed)		
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1.	Has	s fac d ana	cility developed and followed a ground-water sampling alysis plan?	Yes	No
Ť	a.	If for	yes, does this plan include procedures and techniques		
		1. 2. 3. 4.	Sample collection? Sample preservation? Analytical procedures? Chain-of-custody control?	Yes Yes Yes	No
	b.	Doe of	s the facility determine the concentration or value the following parameters in ground-water samples?		
		1.	Parameters characterizing the suitability of the ground water as a drinking water supply, as specified in §265, Appendix 3?	Yes	No
		2.	Parameters establishing ground-water quality (chloride, iron, manganese, phenols, sodium, sulfate)?	Yes	No
		3.	Parameters used as indicators of ground-water contamination (pH, specific conductance, total organic carbon, total organic halogen)?	Yes	No
	С.	cond	the owner/operator established initial background centrations or values of all parameters specified we at least on a quarterly basis?	Yes	No
	d.	meas	owner/operator obtained at least four replicate surements for each sample, and has he determined initial background arithmetic mean and variance?	Yes	No
	e.	Afte anal	er the first year, does owner/operator sample and lyze with the following frequencies:	Yes	No
		1.	Samples collected to establish background quality (from above)?	Yes	No
		2.	Samples collected to indicate contamination (from above)?	Yes	No
		3.	Elevation of ground-water surface at each monitoring well at each sampling event?	Yes	No
Sec:	tion	C -	Preparation, Evaluation, and Response (Part 265 only)		
	Did	owne	r/operator prepare an outline of a ground-water assessment program?	Yes	No
(cor	ntinu	ied)			
OCUI	. n .				

a.	If yes, did program determine the following:		
	 Whether hazardous waste or hazardous waste constituents have entered the ground water? Rate and extent of hazardous waste or hazardous 	Yes	N
	waste constituent migration?	Yes	N
	3. Concentrations of hazardous waste or hazardous waste constituents in ground water?	Yes	No
b.	For each well, has owner/operator calculated the arithmetic mean and variance, based on four replicate measurements for each sample, and compared the results with initial background mean?	Yes	Nc
C .	Has owner/operator submitted information documenting any significant increase in comparisons for upgradient wells (or decrease in pH)?	Yes	No
d.	If the comparisons for downgradient wells show a significant increase (or pH decrease), has the owner/operator obtained additional ground-water samples from those downgradient wells in which a significant decrease was detected? (Samples must be split in two, and analyses must be obtained of all additional samples to determine whether the significant difference was a result of lab error?	Yes	No
	 If analyses (described above) were performed, and confirmed the significant increase (or pH de- crease), did owner/operator notify Regional Administrator within 7 days? 	Yes	No
	 If analyses confirmed significant increase (or pH decrease), did owner/operator submit to the Regional Administrator within 14 days after notification (discussed above) a certified ground-water quality assessment program? 	Yes	No
	a. If yes, does plan include the following:		
	 Number, location, and depth of wells? Sampling and analytical methods for those hazardous wastes and hazardous 	Yes Yes	No
	waste constituents at the facility? 3. Evaluation procedures, including any use of previously gathered ground-water quality information?	_Yes	No
icratinu	4 Schedule of implementation?	_Yes	No
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3.	Aid owner/operator implement the ground-water qualify-assessment program and, at a minimum, did he determine the following:	Yes	No
	a. Rate and extent or migration of the hazardous waste constituents in the ground water?b. Concentrations of the hazardous waste in the ground water?	Yes Yes	No
4.	Did owner/operator submit a report to Regional Administrator containing the requests of the assessment outlined in No. 3 above within 15 days?	Yes	No
5.	Did owner/operator notify Regional Administrator of reinstatement of indicator evaluation program upon finding that no hazardous waste or hazardous waste constituents had entered the ground water?	Yes	No
6.	If owner/operator determined that hazardous waste or hazardous waste constituents entered the ground water, did he either continue to make the determinations listed in No. 3 above on a quarterly basis until final closure or ground-water quality-assessment plan was implemented prior to post-closure care, or cease to make determinations required in No. 3 above if ground-water quality-assessment plan was implemented during post-closure?	Yes	No
7.	If any ground-water quality-assessment program is implemented to satisfy No. 3 above prior to final closure, has owner/operator completed program and reported to Regional Administrator, as outlined in No. 4 above?	Yes	No
8.	If owner/operator does not monitor at least annually to satisfy No. 3 above, does owner/operator evaluate data on ground-water elevation obtained under No. 2e in Section B above to determine whether the requirements for locating monitoring wells are satisfied?	Yes	No
	a. If evaluation shows that the requirements for monitoring wells are not satisfied, has owner/operator modified the number, location, or depth of the monitoring wells to bring the system into compliance?	Yes	No

(continued)

Section D - Recordkeeping and Reporting (Part 265 only)

1.	 Unless owner/operator is monitoring to satisfy the require- ments of §265.93(d)(4), does owner/operator: 			
	a.	Keep records of the analyses required in §265.92(c) and (d), ground-water surface elevations required in 265.93(b) throughout the active life of the facility and throughout post-closure?	Yes	N
	b.	Report the following information to the Regional Administrator:		
		 Within 15 days of analysis for each quarterly sampling event, does owner/operator submit re- sults of background concentrations? 	Yes	Nc
		 Does owner/operator inform Regional Administrator about any parameters that exceed maximum contami- nant levels listed in Appendix III? 	Yes	No
		3. (Annually) does owner/operator report concentra- tions or values of parameters listed in §265.92(b)(3) for each well, including required evaluations for these parameters under §265.93(b)?	Yes	No
		a. Does owner/operator also identify differences from initial background concentrations found in the upgradient wells no later than March 1 following each calendar year?	Yes	No
2.	lace	s owner/operator submit results of the ground-water sur- e elevations under §265.93(f), along with a description the response, if needed?	Yes	No
3	If §	ground water is monitored to satisfy requirements of 5.93(d)(4), did owner/operator do the following:		
	a .	Keep records of analyses and evaluations specified in the plan throughout active life and post-closure?	Yes	No
	b.	(Annually, until final closure) submit to the Regional Administrator a report containing the results of the ground-water quality assessment program, including the calculated rate of migration of hazardous waste or hazardous waste constituents by March 1?	Yes	No
/con	tinu	ed)		

Section E - General Requirements (Part 264 only)

1.	Doe	s ta	cility comply with the following requirements?		
	a.	Are	sufficient wells installed at appropriate locations depths?	Yes	No
	b. c. d.	Hav	e sampling and analysis techniques been consistent? e ground-water elevation data been recorded? e background concentrations been determined?	Yes Yes Yes	No No No
2.	If §26	grou 5.93	nd water is monitored to satisfy requirements of (d)(4), owner/operator must:		
	a.	in	p records of the analyses and evaluations specified the plan throughout the facility's active life, and, disposal facilities, throughout post-closure.	Yes	No
	b.	Rep	ort the following ground-water monitoring information:		
		1.	During the first year when initial background concentrations are being determined, did owner/operator submit values within 15 days after completing analysis?	Yes	No
		2.	If yes, did owner/operator also submit an identi- fication of any parameters whose concentrations exceed maximum levels in Appendix III?	Yes	No
		3.	(Annually) did owner/operator report concentrations or values of the parameters listed in §265.92(b)(2) for each well, along with required evaluations for these parameters under §265.93(b)?	Yes	No
		4.	Did owner/operator also separately identify any significant differences from initial background concentrations for upgradient wells?	Yes	No
		5.	Did owner/operator report on the results of ground-water surface elevations (and a description of the results if necessary) by March 1 of the following year?	Yes	No
Sect	ion	F -	Detection Monitoring Program (Part 264 only)		
Ι.	Has	owne	er/operator established detection monitoring system ide reliable indications for detection releases?	Yes	No
con	tinu	ed)			

	a.	If yes, are the following components included in the system:		
		 Background values? Determination of ground-water flow rate? Determination of ground-water compliance point semiannually? Determination of statistically significant increases over background concentrations? Notification to Regional Administrator if there was a statistically significant increase? 	Yes Yes Yes Yes Yes	No No No No
<u>Sect</u>	ion	G - Compliance Monitoring Program (Part 264 only)		
1.	Does	s facility operate a compliance monitoring program?	Yes	No
	a. `	Does facility determine concentrations of hazardous constituents at least quarterly?	Yes	No
1	b.	Does facility determine ground-water flow rate and direction in uppermost aquifer annually?	Yes	No
(С.	Does facility analyze samples for Appendix VIII constituents annually?	Yes	No
C	d.	Does facility make statistically significant increases over background values?	Yes	No
e		If there is an increase, does facility notify Regional Administrator and submit to establish a corrective-action program?	Yes	No
Secti	on	H - Corrective-Action Program (Part 264 only)		
1. D	oes	facility follow a corrective-action program that meets facility's permit requirements?	Yes	No
'See	RCR/	A Ground-Water Monitoring Systems (OSWER Nos., 9950.2, 999	50.3, 99	50.4)

WASTE INFORMATION WORKSHEET (To be filled out for each facility waste)

WASTE NAME:
PROCESS GENERATING THE WASTE: Taule cleaning, woste oil, machino
HOW HAS FACILITY CLASSIFIED THE WASTE ? HAZARDOUS(if so, list waste code) NON-HAZARDOUS HOW HAS FACILITY MADE THIS DETERMINATION ? TESTINGPROCESS KNOWLEDGE
ARE AMY TEST RESULTS AVAILABLE ? YES(if so, look at) NO WASTE GENERATION RATE:
DISPOSAL PROCEDURE: CURRENT
HAVE MANIFESTS BEEN USED FOR OFF-SITE SHIPMENT ? YES(if so, look at) NO
IS WASTE SUBJECT TO LAND DISPOSAL RESTRICTIONS UNDER 40 CFR 268 ?
IS WASTE SUBJECT TO EXCLUSIONS UNDER 40 CFR 261.4 ?